

# Epilogue: Lessons Learned from a Global Examination of the Doctorate

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Generations from now, observers will likely look back at early twenty-first century higher education and note a chaotic system in a state of change. Evidence of this chaos abounds. The funding structure of higher education remains in flux, regardless of national context, as countries seek to balance public and private contributions to postsecondary learning. Colleges and universities are encouraged to participate in a global conversation, while simultaneously increasing their commitment to their local community. Issues of staffing, particularly among full-time faculty, raise concerns about professional stability and engagement. More students are pursuing higher education, bringing with them a diversity unmatched in previous generations. These students are part of the deepening conversation regarding lifelong learning (Schuetze & Slowey, 2013). Not only are higher education institutions expected to facilitate critical thinking and intellectual openness, but they are also responsible for the provision of educational opportunities over the course of an individual's life (Stephenson & Yorke, 2013). Taken as a whole, these changes require higher education institutions to more deeply examine the ways in which they define knowledge and enable its dissemination (Christensen & Eyring, 2011).

As the chapters in this volume have indicated, the evidence of change in twenty-first century higher education is particularly noteworthy in graduate and doctoral education (Nerad & Heggelund, 2011). While the doctorate degree has been traditionally associated with the PhD, along with its associated standards and norms, the doctorate is increasingly delivered in multiple and variable formats. The progression of the doctorate is not necessarily new, which is evident by its varying forms of existence in multiple countries. For example, American audiences may be most familiar with the

education doctorate, given its history and visibility in the United States, whereas in Germany, the doctorate has long reflected the specific academic discipline rather than a philosophy designation. Furthermore, Russian universities offer both a candidate and a doctor of sciences, of which the latter may also be named for the discipline in which it is awarded. Among the academic disciplines, and around the world, doctorates in business administration, technology, science, and divinity (among others) proliferate, representing historical efforts by the academy to recognize and differentiate between multiple forms of knowledge, curricula, and student interests in ways specific to the regional context. The professional doctorate in particular illustrates the symbiotic relationship between higher education and the professions (Taylor & Storey, 2013). As professions such as medicine, law, social work, and nursing evolve to meet contemporary social needs, so should the terminal degree as a means to recognize a mastery of knowledge within the field.

It is the question of recognition that remains central to issues of the changing doctoral degree. Multiple stakeholders play a role in this process. While members of the profession must obviously embrace the degree as a benchmark of professional status, so must employers, the university, federal and state governments, members of the public, and so on. These multiple perspectives shape the doctorate, and its credibility relies on its acceptance (Wellington, 2013). The question of how academic institutions lead and support the development of the doctorate is significant. How are faculty trained to teach in doctoral programs? How are doctoral students supported financially? What relationships exist between the academic institution and industry? The chapters in this volume offer insight in organizational change, faculty learning, student engagement, and community partnerships, underscoring the complex issues related to the evolving doctoral degree. In this epilogue, I consider the chapters as a whole and offer three lessons learned from a global examination of the doctorate in its many forms:

1. *A changing social, economic, and political culture requires changes to the ways in which higher education institutions structure and deliver a curriculum.*

Across highly developed economic societies, the doctoral degree is frequently conceptualized as a strategic tool designed to provide larger benefits. Policies of innovation and economic growth are constructed with the doctorate at the center. The doctorate is presumed to open avenues toward scientific advancement that benefit society at large. When a lack of domestic students who are qualified and interested in doctoral education exist,

international students are recruited, furthering the exchange of knowledge across national boundaries as well as the imbalance between advanced and emerging economies. Change in higher education credentials can be in part attributed to changing governmental and national priorities. In Chapter 2, for instance, Charles Mpfu provides evidence related to the growth of psychology and medicine professional doctorates in Australia and New Zealand with fluctuating governmental policies designed to facilitate economic growth. On the one hand, this approach privileges experimentation. National and state governments are willing to provide additional inputs, such as financial or other instrumental resources, in exchange for increased outputs, such as knowledge workers trained through innovative, applied curricula. On the other hand, the symbiotic relationship between the academy and the state emphasizes the challenging illusion of an autonomous higher education, where institutions prioritize student learning and knowledge production independent of external interests. Decisions are rarely, if ever, made simply for the sake of knowledge. Knowledge spills over institutional boundaries into multiple external arenas, requiring faculty and administrators to carefully balance the needs of the student, the institution, and society at large.

The changing nature of the doctorate is apparent in both the process and product of graduate education. Although the doctorate has been nurtured in different institutional and national contexts over an extended period of time, shared expectations do exist related to its key features. An examination of the different traits associated with doctoral education include critical and independent thinking, strong communication skills, a depth of knowledge related to the discipline, and the ability to generate and apply new knowledge (Nerad & Heggelund, 2011). Additional traits more recently identified include the need for translational or soft skills, and the ability to work as part of a team. As the path to the academic profession becomes increasingly complicated, and degree recipients choose more varied professional positions compared to previous generations, these transferable skills assume greater importance. Traditionally doctoral students are those who engage in full-time, on-campus study. Contemporary doctoral students are likely to be enrolled in a low-residency or online program, or experience a cohort-structured curriculum, expanding our notions about student learning in the classroom. Students may only interact with their peers via distance. Instead, their network of professional colleagues assumes an enhanced role in student persistence and degree completion. The variability of the dissertation process is directly related to the variability of the product while the dissertation is still considered by many observers to be the apotheosis of the doctoral experience, other forms such as the portfolio, the group project, action research and/or

community engagement, digital scholarship, and the article collection prosper. At times, lost in the debate regarding the validity of these multiple forms of doctorates is the relationship to new forms of knowledge needed (and indeed, prioritized) by external stakeholders. Storey and Maughan contribute to this necessary conversation in Chapter 12 with considerations of how a practice-based doctoral capstone experience defines the practitioner-scholar. As the doctorate changes and evolves over time, so should one of its most distinctive, authoritative elements, the dissertation. “The research university is not simply a content delivery device,” suggests Wellmon (2015, p. 3). “It is an institution unique in its capacity to produce and transmit knowledge that is distinct and carries with it the stamp of authority.” Alternative forms of the dissertation recognize the need for such work to be socially relevant.

Related to these shifts is the increasing prominence of interdisciplinary knowledge. In Chapter 11, Pulla and Schissel consider how interdisciplinarity influences the core of the university, the faculty. Interdisciplinary initiatives have rippled through higher education for decades; indeed, in many countries, interdisciplinarity was the hallmark of innovation for undergraduate learning in the twentieth century. For doctoral education, the interdisciplinary challenge runs much deeper. The emergence of the contemporary doctorate is closely connected to the development of the disciplines (and their organizational form, the academic department). The disciplines allowed scholars to manage the vast nature of knowledge, encouraging depth and specialization. Disciplinary identity is related to a shared sense of community with like-minded scholars. As observers proclaim interdisciplinarity to be a necessity for twenty-first century challenges, its impact on the doctoral degree, faculty, students, and academic institutions is unclear. What does interdisciplinary knowledge look like as part of a doctoral curriculum? What skills should graduates of an interdisciplinary doctoral program possess? To which academic community do interdisciplinary scholars belong? What impact do doctoral recipients trained in an interdisciplinary program have on the larger society, and how does this impact compare to more traditional disciplinary-based efforts?

2. *Innovations should be sensitive to the local, institutional, and national context, although these variations make it a challenge to define the degree and wholly grasp its impact.*

The last two decades have witnessed a growth in the number of earned doctoral degrees around the world, including research and professional degrees. In the first decade of the twenty-first century, the number of earned doctorates in OECD countries increased by a staggering 38%,

a growth unparalleled in previous decades (Organization for Economic Cooperation and Development, 2012). The growth of earned doctorates provides evidence of the belief that advanced, specialized knowledge plays a crucial role in a healthy society. Yet as a higher education community and a group of scholars focused on doctoral education, we are cautioned to look beyond the increased numbers of doctorates and consider the content of the degree, student experiences in these programs, and the degree's impact on larger society. This task is not an easy one. The multiple ways in which the doctorate is accomplished makes the task of defining and disseminating best practices difficult, while the balance between local needs and global scholarship is not always easily negotiated. Such balance is complicated by the influences of marketization and globalization, where academic institutions strive to climb the ladder of elite, prestigious research universities.

Although the doctorate is a shared degree, recognized across national boundaries, it is also uniquely the outcome of the context in which it is produced. In Chapter 14, Lee's discussion of the Te Puna Wānanga EdD reveals how academic institutions balance local culture and organizational behavior. The chapter also underscores how pedagogy that privileges local ways of knowing might uniquely impact social policy. In addition to local influences, evidence of global cooperation in doctoral education can also be found. In Chapter 10, Kochhar-Bryant discusses the challenge of cross-national cooperation, or the ways in which academics in different national contexts might develop and deliver a doctoral curriculum. These partnerships may reflect shared economic, political, or cultural concerns between nations. Innovative doctoral programs are defined by international networking opportunities, in addition to industry exposure, an attractive institutional environment, interdisciplinary research options, and a focus on transferable skills (European Commission, 2011). One example is Russia's Skolkovo Institute of Science and Technology. Skolkovo, in cooperation with the Massachusetts Institute of Technology (MIT), was established in 2011 to produce leaders prepared to engage in innovative practices, advance knowledge, and apply new technology to global issues not only in Russia, but around the world. Other partnerships utilize classroom settings around the world as a way to engage students in global conversations. The Global Executive Doctor of Education program at the University of Southern California requires students to meet in California, Hong Kong, and Qatar, as well as online, while the IESE Business School at the University of Navarra (Spain) encourages doctoral students to complete research abroad and earn the designation "international doctor."

While these markers of innovation may signal new avenues for doctoral education, many of the social issues which have plagued the degree

still exist. Of significance are patterns of inclusion and exclusion that exist among student groups around the world that have long-term effects on doctoral recipients. From a global perspective, men far outpace women in the science and engineering workforce (UNCTAD, 2011). Women also have less access to the Internet, and hold fewer leadership positions in business and government, which contribute to a gender divide in the knowledge economy. This divide persists even among men and women who have received a doctoral degree. Though smaller than the gap between men and women who do not hold a doctorate, female doctoral recipients also experience bias related to salary, wage, and employment rates (OECD, 2012). The issue of mass versus elite education only adds to the complexity of these patterns. While the hierarchical nature of higher education is not necessarily new, the implications as part of a market-driven culture are.

Marginson (2006) referred to higher education as a “positional market,” suggesting that the value of a good is in part determined by its exclusivity. “The steeper the distance between elite universities and others, the more that society values elite universities and the less it sees of their benefits,” he concluded (2006, p. 6). Who pursues higher education, and how is a country’s education system designed to support this pursuit? Is the impact of the doctoral degree magnified by an increased number of recipients, or is it diluted? When a national system supports the development of a doctoral curriculum for the academically elite, who is included in that process?

3. *An application of the critical friends approach requires recognition of multiple communities of practice, including the profession that supports the degree.*

Numerous theories have been employed to better understand the doctoral experience, including theories of socialization, identity development, as well as career and/or professional trajectories. The chapters in this volume expand our understanding of doctoral education by evoking the critical friends framework, suggesting a network of partners who provide candid critique and ideas in order to collectively strengthen doctoral education. This framework illustrates how multiple stakeholders are involved in the doctoral process, including students, faculty, administrators, industry, government, and the public. An evolving doctorate changes the ways in which faculty and students interact with each other as well as with other institutional stakeholders. For instance, extant research has documented the significant role that peers play in the experience of doctoral students. A lack of integration among a student’s peer group results in a reduced chance for degree completion (Gardner, 2008), as peers can serve as vital resources in student learning. When students learn at a distance, engage in a virtual

learning environment, or visit campus infrequently for a low-residency program, peer relationships change. We do not yet fully understand how these relationships influence alternative degree programs; however, these integrative processes have served to be beneficial to student learning outcomes. Therefore, communities of practice extend beyond the traditional face-to-face learning approach that dominated twentieth-century higher education. Advanced, deep, and significant learning can occur in a variety of contexts, ranging from the workplace to a virtual online environment.

These communities of practice also influence the development of the doctoral curriculum. Multiple chapters in this volume have illustrated the nature of the curriculum as a social artifact, reflective of a unique community and its priorities, norms, and beliefs. Through the transmission of knowledge from one generation of scholars to the next, the curriculum becomes an ever-evolving reflection of disciplinary culture. Uncertainties exist as to what role the profession plays in the doctoral curriculum, and how the discipline and the profession exist in a symbiotic relationship. For example, in Chapter 5, Smythe, Rolfe, and Larmer suggest that a successful health professional doctorate places the health client, or patient, at the center of learning. How might a curriculum shift to a more active, applied focus, and what implications are there for student learning? The doctoral degree has historically prioritized the discipline, or discipline-specific knowledge, at its center. For North American universities, students participate in a progressive curriculum designed to deepen their understanding of how the field is structured. This approach also ensures that doctoral students are socialized to seminal authors, ideas, and theories of the discipline, further strengthening the disciplinary community. The changing nature of the curriculum is indicative of shifts taking place between different knowledge boundaries. In Chapter 9, Nikolou-Walker illustrates the power of work-based learning; rather than starting from the norms of the academic discipline, such programs develop a learning agreement responsive to the individual candidate and his or her workplace setting.

A frequently unacknowledged partner for doctoral education is the job market. American economist Anthony Carnevale suggested, “Graduate and professional education contributes to the creation of a new class of global workers that heightens the conflict between local, national, and global perspectives on its proper economic role” (CGS, 2009, p. 32). The knowledge economy transcends national boundaries. While knowledge workers may be part of a local or regional community, they are also members of a globalized group. Doctoral students leave one country to study in another, conduct research in an international setting, or assume employment in locations other than their home country. The complex doctoral student population reinforces the challenges of a global job market. The push for

more doctoral degree recipients is weakened without a market to magnify their talents. While not all knowledge exists toward utilitarian ends, contemporary rhetoric privileges knowledge, which possesses extrinsic value.

In conclusion, perhaps the biggest challenge facing doctoral education in the future is maintaining the integrity of the degree while being open to innovation, change, and new directions. This edited volume provides an important step in collecting information on the range of doctoral programs around the world, revealing how the forces of globalization are influencing multiple higher education systems. The preparation of scholars for this reality requires attention to the doctorate in its many forms.

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